



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,084	08/16/2005	Nicolas Drabczuk	09669/043001	4431
22511	7590	08/23/2006		
OSHA LIANG L.L.P. 1221 MCKINNEY STREET SUITE 2800 HOUSTON, TX 77010				EXAMINER SORRELL, ERON J
			ART UNIT 2182	PAPER NUMBER

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/521,084	DRABCZUK, NICOLAS	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 13 January 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-10 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 13 January 2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____ .  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____ .                                  |

***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The title "USB device" alludes only one particular claimed embodiment.
2. The following title is suggested: "Device functionalities negotiation, fallback, backward-compatibility, and reduced-capabilities simulation."
3. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: Paragraphs 12, 24, 37, 38, 40, 39, 41, 43, 44.
4. **Paragraph 12:** Examiner believes applicant did not mean to write "In particular, the invention allows to mass-produce auxiliary devices arranged to effect the same standard set of functionalities" but instead meant to write "In particular, the invention allows one to mass-produce auxiliary devices arranged to appear to effect the same standard set of functionalities." This is based on examiner's interpretation of paragraph 27, in which services can be added, but the standard service S0 presented to the host does not change.
5. **Paragraph 24:** This paragraph contains the service activating step, which can operate by "disconnecting and reconnecting the USB device to the USB host" and the INIT step, in which the device "detach[es] itself and then re-attach[es] itself." As best

understood by examiner, the former “service activating step” and the later “initialization step” are the same step. If they are indeed the same step, examiner does not know why they are listed twice; if they are not the same step, examiner cannot determine how the two differ. Applicant must amend the specification to clarify this.

6. **Paragraphs 37, 40:** Examiner assumes that by “GSM” applicant is referring to a type of mobile phone that adheres to the *Global System for Mobile Communications* standard.

7. **Paragraphs 37, 38, 40:** Examiner assumes that by “PDA” applicant is referring to a Personal Digital Assistant device.

8. **Paragraph 39:** Examiner assumes that by “APDU” applicant is referring to the Application Protocol Data Unit as defined by ISO 7816 standards.

9. **Paragraph 39:** Based on the cryptography uses (“keys” and “signature” before and “DRM,” which examiner interprets as digital rights management, after), examiner believes applicant did not intend to write “Data streaming application” but instead meant to write “Digital Rights Management”

10. **Paragraph 41, last line:** Examiner does not see how only service S0 would be accessible in environment E4 when only the driver for S1 (not S0) is available. Examiner assumes applicant meant to write S0.

11. **Paragraph 43:** Examiner assumes applicant did not intend to write “other protocol like” but instead meant to write “other protocols like”

12. **Paragraph 44:** Examiner assumes applicant did not intend to write “master/slave protocol” but instead meant to write “master/slave protocol.”

***Drawings***

13. The drawings are objected to because figures 1 and 4 do not correspond to the specification.

14. As to figures 1 and 4: The specification does not show how application A1, requiring services S1 and S2 can use drivers D1 and D2, while A2 needing S2 and S3 can use D1 and D3. Examiner will assume "A2(S2, S3) -> D1, D3" should be "A2(S2, S3) -> D2, D3" in both figures.

15. As to figure 4: Figure 4 does not correspond to the specification. Paragraph 28 states application A3 needs service S4 as illustrated in figure 4. However, figure 4 shows A3 using (or needing) S1 in addition to S4.

16. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

17. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

18. Claims 1, 2, 4, 6-10 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. *Hiding functionalities by re-enumeration*, critical or essential to the practice of the invention, but not included in the claims is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). As best understood by examiner (in light of examiner's assumption of the meaning of "hide"), functionalities can only be hidden via non-disclosure during re-enumeration. According to paragraph 25, the host performs a second enumeration step (re-enumeration) during which "only the descriptors... associated to the services... which have been activated... will be retrieved...." As best understood by examiner, services are functionalities, and activated services are functionalities the host can handle. As best understood by examiner, the host retrieves only the descriptors associated to the functionalities (services) that the host can handle (have been activated) because the device is hiding the other functionalities. If re-enumeration does not occur, there is no opportunity for functionalities to be hidden. This essential re-enumeration is not mentioned in these rejected claims.

19. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 2182

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

20. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

21. As to claims 1, 2, 8, and 9: The term "hides" (or "hide") is a term subject to several interpretations or meanings, which renders the claim indefinite. The term "hides" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. "To hide" can mean "to prevent the disclosure or recognition of" or "to put or keep out of sight." For the purposes of this application, examiner will interpret "hide" to mean "to put or keep out of sight," as in: the disclosure of functionalities by the auxiliary device to the main device has not been prevented or inhibited, but subsequent disclosures of functionalities by the auxiliary device keep out-of-sight from the main device certain functionalities of the auxiliary device.

22. As to claims 3-7, and 10: These claims depend on claim 1 and therefore inherit the same deficiency, and are rejected for the same rationale as claim 1.

***Claim Rejections - 35 USC § 102***

23. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

24. Claims 1, 2, 3, 4, 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Rivera et al. (*Transparent Automoding Procedure between a Local (Client) Modem and a Remote (Server) Modem* published by IBM August 1, 1999, hereinafter "Rivera").

25. As to claim 1: A method of configuring a system comprising a main device and an auxiliary device arranged to co-operate with each other (2 modems, see paragraph 1), the main device being arranged to handle one or more functionalities, the auxiliary device being arranged to effect one or more functionalities (each modem can effect or handle various protocols, see paragraph 1), wherein the method comprises an adaptation step, in which the auxiliary device hides from the main device at least those of its functionalities for which the main device is not arranged to handle (the Client modem (auxiliary device) loads code for a selected protocol (functionality) while the Server (main device) is unaware (because it is hidden), see paragraph 2).

26. As to claim 2: The method according to claim 1 (taught by Rivera, above), wherein the adaptation step comprises the following sub-steps:

a notification step, in which the auxiliary device notifies the main device of a set of data identifying the one or more functionalities that the auxiliary device can effect (see transmission of CM octets by Client modem, paragraph 3, in which the Client modem (auxiliary device) notifies the Server modem (main device) of its capabilities (the functionalities it can effect));

an identification step, in which the set of data is used to identify the functionalities that the auxiliary device can effect but that the main device cannot handle (see transmission of JM octets, paragraph 3, in which the Server modem

(main device) identifies to the Client modem (auxiliary device) the capabilities that both can use); and

a configuration step, in which the auxiliary device is configured to hide from the main device at least those of its functionalities that the main device cannot handle (see unloading of unsupported protocol in paragraph 4, in which the Client modem (auxiliary device) unloads V.90 (functionality that cannot be handled), thereby putting it out of sight (hiding)).

27. As to claim 3: The method according to claim 2 (taught by Rivera, above), wherein the adaptation step is followed by an enumeration step, in which the auxiliary device presents itself to the main device without the functionalities identified in the identification step (see paragraph 4, in which Client modem (auxiliary device) presents itself as an X2 modem (without the V.90 functionalities) to the Server modem (host device)).

28. As to claim 4: The method according to claim 1 (taught by Rivera, above), wherein the adaptation step is carried out automatically when connecting the auxiliary device to the main device (see paragraph 1, in which Rivera teaches it is important to adapt and detect capabilities automatically).

29. As to claim 8: Claim 8 recites the system enabled by the method of claim 1, and is rejected for the same rationale as claim 1.

30. As to claim 9: Claim 9 recites a device necessary for the implementation of the method of claim 1, and is rejected for the same rationale as claim 1.

31. As to claim 10: Claim 10 recites the physical embodiment of the software to carry out the method of claim 1, and is rejected for the same rationale as claim 1.

***Claim Rejections - 35 USC § 103***

32. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

33. Claim 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rivera and Sonoda. (U.S. Patent No. 6,647,452 hereinafter "Sonoda").

34. As to claim 5: The method according to claim 3 (taught by Rivera, above), wherein a simulation step is carried out between the adaptation step and the enumeration step, in which the disconnecting and the reconnecting of the auxiliary device is simulated (see Sonoda, abstract, in which an apparent disconnect and reconnect is performed without any physical disconnection or reconnection).

35. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the adaptation step method of Rivera with the simulated disconnect and reconnect method of Sonoda. One of ordinary skill in the art would have been motivated to combine the two so as to not require users to remove and reinsert the cable from the peripheral device (see Sonoda, col. 2, lines 52-59).

36. As to claim 6: The method according to claim 1 (taught by Rivera, above), wherein the main device is a USB host and in that the auxiliary device is a USB device (See Sonoda, col. 1, lines 9-11).

37. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the adaptation step method of Rivera and use it in a system arranged to cooperate consisting of a USB host and device. One of ordinary skill in the art would have been motivated to combine the two so as to take advantage of features in the USB specification, such as hot-plugability.

38. As to claim 7: The method according to claim 1 (taught by Rivera, above), wherein the auxiliary device is a smartcard (see Sonoda, col.1, lines 21-25).

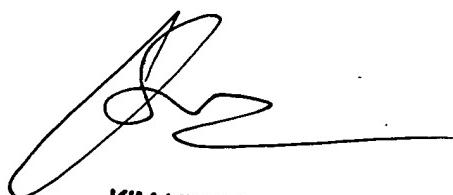
39. While Sonoda does not explicitly state that a smartcard can be a USB device, the examiner takes official notice that it is notoriously well known that a smartcard can be a USB device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the hiding method of Rivera and implement it in a USB device such as a smartcard. One of ordinary skill in the art would have been motivated to combine the two so as to take advantage of the features a smart card may have, such as identification or bank account information.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eron J. Sorrell whose telephone number is 571 272-4160. The examiner can normally be reached on Monday-Friday 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



KIM HUYNH  
SUPERVISORY PATENT EXAMINER

8/10/06